ABSTRACT

A series of quinazoline derivatives were synthesized and characterized by IR, ^{1}H-NMR, and ^{13}C-NMR. We compared methodology for the synthesis of substituted 3-(benzylideneamino)-2-(2-chlorophenyl)quinazolin-4(3H)-one using conventional heating with microwave irradiation. It aims to find out if microwave-assisted synthesis of substitued 3-(benzylideneamino)-2-(2-chlorophenyl) quinazolin-4(3H)-one adds any advantage or not. The results suggest that microwave-assisted synthesis proved much more convenient and dramatically cutting down reaction times. Subsequently, by comparing total reaction time of four different substituted 3-(benzylideneamino)-2-(2-chlorophenyl)quinazolin-4(3H)-one, It was found that electron donating presents in benzaldehyde is shortening the reaction times and electron withdrawing group presents is extending the reaction times. These findings described that the type of benzaldehyde substituents have role in these synthesis.

Keywords : quinazoline, conventional synthesis, microwave-assisted synthesis